

METHOD FOR FABRICATING AN ALIGNMENT LAYER FOR LIQUID CRYSTAL APPLICATIONS

Abstract

A method for forming a non-rubbing alignment layer is provided.

A vacuum chamber disposed therein with an evaporation source, a substrate, and an ion source is prepared. The substrate has a flat main surface facing the evaporation source. The ion source generates an ion beam that bombards the flat main surface with an oblique incident angle α with respect to a line normal to the flat main surface. The substrate is rotated at a constant rotation speed. The evaporation source is heated to vaporize inorganic substances of the evaporation source to diffuse and deposit onto the flat main surface substantially along the line normal to the flat main surface, thereby forming the non-rubbing alignment layer.

During deposition of the non-rubbing alignment layer, the ion beam emanated from the ion source continues to bombard the flat main surface.